SEQUENCE LISTING

<110> Murphy, Brian R.
Collins, Peter L.
Durbin, Anna P.
Skiadopoulos, Mario H.
Tao, Tao

<120> USE OF RECOMBINANT LIVE-ATTENUATED PARAINFLUENZA VIRUS (PIV) AS A VECTOR TO PROTECT AGAINST DISEASE CAUSED BY PIV AND RESPIRATORY SYNCYTIAL VIRUS (RSV)

<130> 17634-000330

<140> 09/458,813
<141> 1999-12-10

<150> 09/083,793
<151> 1998-05-22

<150> 60/047,575
<151> 1997-05-23

<150> 60/059,385
<151> 1997-09-19

<160> 30

<170> PatentIn Ver. 2.1

<210> 1
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 1
cttaagaata tacaaataag aaaaacttag gattaaagag cg 42

<210> 2
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 2
gatccaacaa agaaacgaca ccgaacaaac cttaag 36

<210> 3
<211> 101
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 3
aggcctaaaa gggaaatata aaaaacttag gagtaaagtt acgcaatcca actctactca 60
tataattgag gaaggaccca atagacaaat ccaaattcga g 101

<210> 4
<211> 79
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 4
tcataattaa ccataatatg catcaatcta tctataatac aagtatatga taagtaatca 60
gcaatcagac aataggcct 79

<210> 5
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of

six.

<400> 5
aggaaaaggg aaatataaaa acttaggagt aaagttacgc gtgttaactt cgaagagctc 60
cct 63

<210> 6
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 6
aggaaaaggg aacgcgtgtt aacttcgaag agctccct 38

<210> 7
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 7
ctaaat 6

<210> 8
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 8
cttaag 6

<210> 9
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 9
tcaatc 6

<210> 10
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 10
acaacgagac cggataaatg ccttctac 28

<210> 11
<211> 67
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 11
attattgctt aaggtttgtt cggtgtcgtt tctttgttgg atcctatctg cgattggttc 60
catcttc 67

<210> 12
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 12
agacaa 6

<210> 13
<211> 6
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 13
aggcct 6

<210> 14
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 14
gacaataggc ctaaaaggga aatataaaaa acttaggagt aaagttacgc aatcc 55

<210> 15
<211> 68
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 15
gtagaacgcg tttatccggt ctcgttgtgg tgacatctcg aatttggatt tgtctattgg 60
gtccttcc 68

<210> 16
<211> 68
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 16
gtagaacgcg tttatccggt ctcgttgtgg tgacatctcg aatttggatt tgtctattgg 60
gtccttcc 68

<210> 17
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 17
ccatgtaatt gaatccccca acactagc 28

<210> 18
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide
insert to conform inserted sequence to rule of
six.

<400> 18
cggataaacg cgttctacaa agataacc 28

<210> 19
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 19
cggataaacg cgttctacaa agataacc 28

<210> 20
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 20
gggccatgga agattacagc aat 23

<210> 21
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 21
caataagctt aaagcattag ttccc 25

<210> 22
<211> 31
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 22
gcgatgggcc cgaggaagga cccaatagac a 31

<210> 23
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 23
cccgggtcct gatttcccga gcacgctttg 30

<210> 24
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 24
agtggctaat tgcattgcat ccacat 26

<210> 25
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 25
gccgtctgca tggtgaatag caat 24

<210> 26
<211> 13
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 26
cgcggcaggc ctg 13

<210> 27
<211> 14
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 27
cgcggcgagg cctg 14

<210> 28
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 28
cgcgaggcct ccgcg 15

<210> 29
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 29
cgcgccgcgg aggcct 16

<210> 30
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleotide insert to conform inserted sequence to rule of six.

<400> 30
cgcgcccgcg gaggcct 17

Concl'd.